

PATENT

Atty. Dkt. No. AMAT/3083.P7/PDC/PDC/OR

REMARKS

This is intended as a full and complete response to the Office Action dated April 7, 2005, having a shortened statutory period for response set to expire on July 7, 2005. Claims 6, 13-17 and 19-21 are indicated to be allowable by the Examiner. Claims 1, 5 and 7-9 and 11 have been amended to clarify the invention. Applicant believes no new matter has been introduced by the amendments presented herein. The amendments have been made in a good faith effort to advance prosecution on the merits. Claim 2 has been cancelled without prejudice. Applicant reserves the right to subsequently take up prosecution of the claims as originally filed in this application in a continuation, a continuation-in-part and/or a divisional application. Please reconsider the claims pending in the application for reasons discussed below.

Claims 5 and 7-8 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,444,265 (*Hamilton*). *Hamilton* is generally directed to a method and apparatus for detecting burnt resist or mask. Burnt resist or mask typically has a flat matte surface finish that does not substantially reflect light. Properly cured resist is clear and allows light to be substantially reflected off the reflective surface of the wafer. *Hamilton*, however, does not teach or disclose inspection of a surface of a patterned substrate, let alone receiving process data readings from at least one optical inspection system, wherein the data readings comprise optical signal signature information indicative of a topographical condition on the patterned substrate surface inspected by the at least one optical inspection system, as recited in claim 5. *Hamilton* also does not teach or disclose a controller system connected to the optical inspection systems and configured to process optical signal information indicative of a topographical condition on a patterned substrate inspected by at least one of the optical inspection systems; and determine a routing sequence for the patterned substrate in response to the topographical condition, as recited in claim 7. Accordingly, claims 5 and 7 are patentable over *Hamilton*. Claim 8 is also patentable over *Hamilton* since it depends from claim 7. Withdrawal of the rejection is respectfully requested.

Claims 1 and 3 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,188,564 (*Hao*) in view of U.S. Patent No. 5,308,447 (*Lewis*).

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Claim 1 has been amended to incorporate the limitation of claim 2, which stands objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form. Claim 2 has been cancelled without prejudice. Accordingly, claim 1 is now patentable over *Hao* in view of *Lewis* since claim 1 recites all limitations of allowable claim 2. Claim 3 is also patentable over *Hao* in view of *Lewis* since it depends from claim 1. Withdrawal of the rejection is respectfully requested.

Claim 10 stands rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,444,265 (*Hamilton*) in view of U.S. Patent No. 6,185,322 (*Ishikawa*).

Neither *Hamilton* nor *Ishikawa*, alone or in combination, teaches or discloses a controller system connected to the optical inspection systems and configured to process optical signal information indicative of a topographical condition on a patterned substrate inspected by at least one of the optical inspection systems; and determine a routing sequence for the patterned substrate in response to the topographical condition, as recited in claim 7. Furthermore, there is no suggestion discerned in *Hamilton* or *Ishikawa* of modifying the devices or methods disclosed therein in the direction of claim 7, nor does there appear to be any suggestion of the desirability of such modifications. Since claim 10 depends from claim 7 and since neither *Hamilton* nor *Ishikawa*, alone or in combination, teaches, discloses or suggests all the limitations of claim 7, claim 10 is therefore also patentable over *Hamilton* and *Ishikawa*. Withdrawal of the rejection is respectfully requested.

Claims 2, 9 and 11-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claim 2 has been cancelled and all of its limitations incorporated into claim 1. Claims 9 and 11 have been rewritten in independent form including all of the limitations of the base claim and all intervening claims. Accordingly, claims 1, 9 and 11 are in condition for allowance. Claim 12 is also in condition for allowance since it depends from claim 11.

In conclusion, the references cited by the Examiner, neither alone nor in combination, teach, show, or suggest the claimed invention. Having addressed all issues set out in the office action, Applicant respectfully submits that the claims are in condition for allowance and respectfully request that the claims be allowed.

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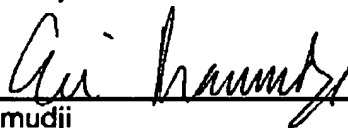
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The prior art made of record is noted. However, it is believed that the secondary references are no more pertinent to the Applicant's disclosure than the primary references cited in the office action. Therefore, it is believed that a detailed discussion of the secondary references is not deemed necessary for a full and complete response to this office action. Accordingly, allowance of the claims is respectfully requested.

Respectfully submitted,



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